

# FLOODPLAIN MANAGEMENT IN GOLDEN PLAINS SHIRE

## DRAFT Corangamite Regional Floodplain Management Strategy

The Corangamite Catchment Management Authority has been working with local communities, Traditional Owners, Councils, the Victorian State Emergency Service (SES) and other regional agencies to prepare the draft Corangamite Regional Floodplain Management Strategy. The Strategy responds to outcomes of the 2016 Victorian Floodplain Management Strategy, with the aim to:

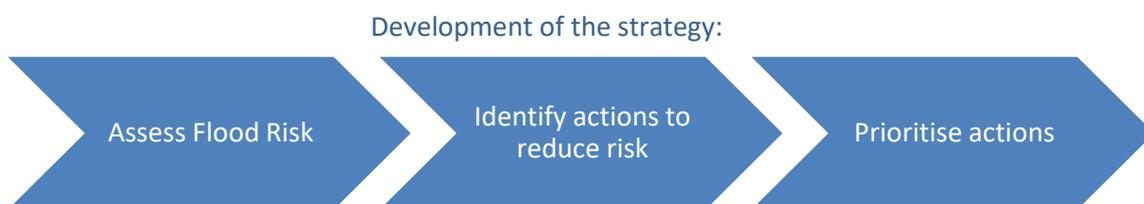
- **Build flood resilience** – by sharing information about flood behaviour;
- **Reduce flood risks** – through emergency management, flood mitigation infrastructure works and risk management;
- **Avoid future flood risks** – through land use planning and building controls;
- **Manage residual flood risks** – through flood insurance, sharing flood risk information and emergency management
- **Protect floodplains for their ecological and cultural values** – by integrating the management of flood risks with protecting the environmental and cultural values of natural floodplains.

This brochure summarises the information in the draft Corangamite Regional Floodplain Management Strategy relevant to Golden Plains Shire, and is consistent with the Shire's intent and capacity to address flooding issues across its entire municipality.

The Shire is spread across three river basins: the Barwon, Corangamite and Moorabool Basins. These basins all contain a number of significant waterways whose floodplains are relatively well confined and become broader in their lower reaches. The major waterways are the Moorabool River, Bruce's Creek, Native Hut Creek, Yarrowee River/Leigh River and the Barwon River.

Inverleigh is at the confluence of the Leigh and Barwon rivers. The town is low lying and is affected by flooding from the Barwon River on its southern edge. Backwater flooding up the Leigh River can cause severe flooding in the town, particularly if floods along the Barwon and Leigh Rivers coincide. The Barwon River has a catchment area of 240 km<sup>2</sup> upstream of Inverleigh, while the Leigh River has an upstream catchment area of about 88 km<sup>2</sup>. An updated flood study for Inverleigh is underway as part of the Inverleigh Structure Plan development.

The northern communities of Golden Plains Shire exists amongst a complex network of creeks and small tributaries that contribute flows to the Woody Yallock and Yarrowee rivers.



## Golden Plains Shire Flood Risks

Inverleigh, Shelford and Teesdale were identified as priority flood risk areas. Inverleigh is situated at the confluence of the Leigh and Barwon rivers. These are arguably the two most significant river systems within the Corangamite region.

Shelford is located on the Leigh River. Most of Shelford is located on the escarpment slopes, above the Leigh River floodplain and therefore it suffers less damage from floods. However there are several houses, the primary school, cricket reserve and Presbyterian Church which are located on the Leigh River floodplain.

Flooding in Teesdale is a result of flooding associated with Native Hut creek which runs through the town.

## Addressing Flood Risk

Actions that do the most to reduce risk have been prioritised. All suggested actions are subject to feasibility, which may require further detailed investigation, and the availability of funding. The suggested actions have been prioritised over a regional scale, and may not address some specific localised issues including stormwater flooding, which are more appropriately dealt with through other channels.

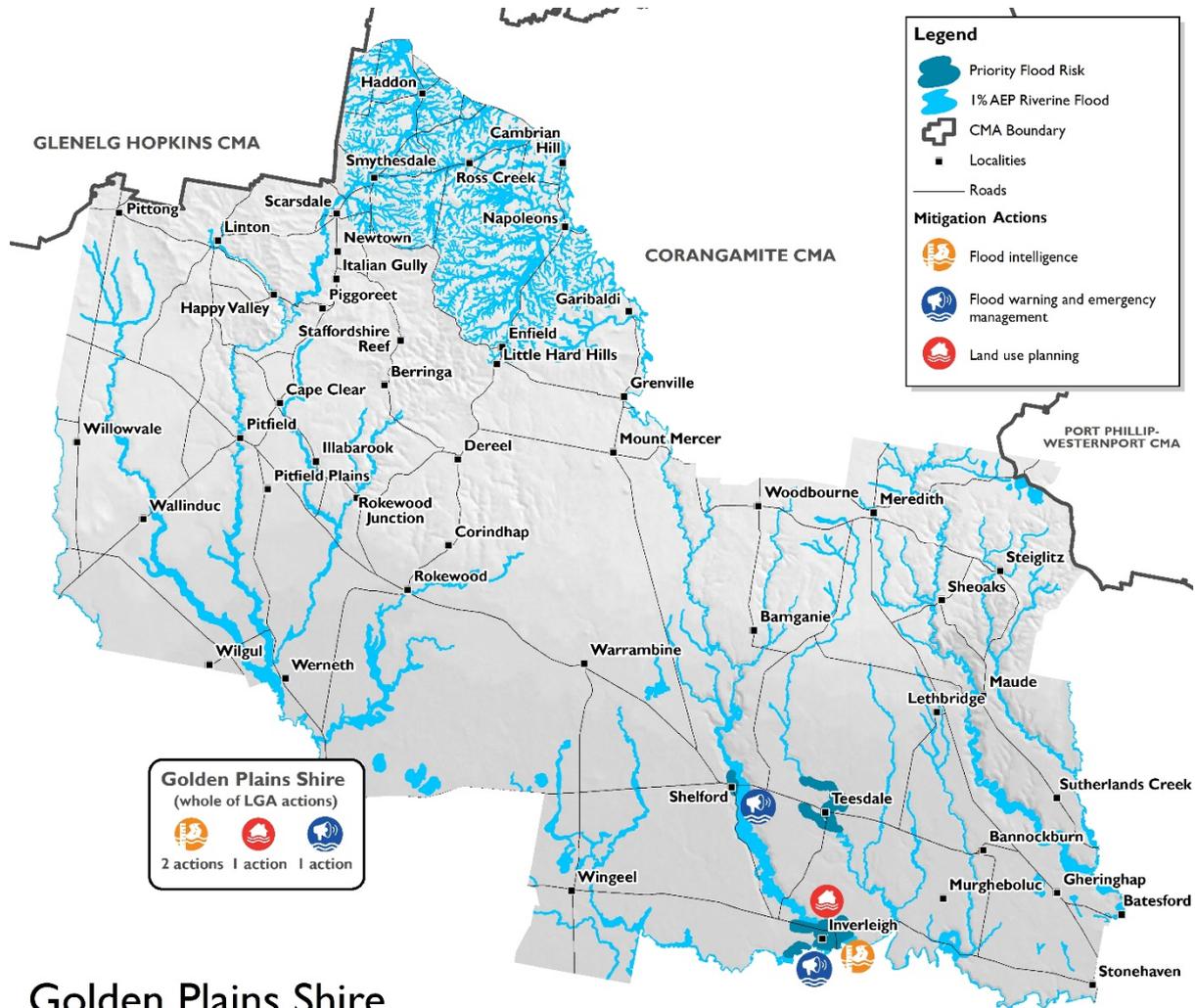
The flood mitigation actions proposed can be grouped into four categories:

**Flood mitigation infrastructure** involves the construction and management of physical works designed to reduce the impacts of flooding, such as levees, floodways and retarding basins. Example actions include managing waterways, developing retarding basins and developing or managing levees.

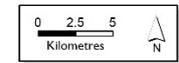
**Flood warning and emergency management** involves community education and awareness in support of flood preparedness to reduce existing flood risks. Example actions include the installation of flood warning systems on roads prone to regular flooding, and developing and sharing detailed flood maps. It also includes emergency management planning to manage residual risks such as updating Flood Emergency Management Plans.

**Flood intelligence** involves acquiring information about flood behaviour in order to understand the flood risk in more detail. An example action is the development of a flood study for a river reach.

**Land use planning** relates to tools such as Planning Schemes and building regulations, which manage development in flood-prone areas to reduce risk to life and property associated with new development. An example action is updating Planning Schemes to reflect current flood mapping.



## Golden Plains Shire Areas of Priority Flood Risk and Proposed Mitigation Actions



Map produced by ASMG: 25/07/2017

## Possible Flood Mitigation Actions

	<p><b>Flood Warning and emergency management</b></p> <ul style="list-style-type: none"> <li>• Act on recommendations from the Inverleigh Flood Study for improvements to the flood warning system for the study area.</li> <li>• Investigate the feasibility of a road inundation assessment (e.g. depth of over road flooding) to help council and the VICSES plan for road closures during flood events and to better plan for potential road damages.</li> </ul>
	<p><b>Flood Intelligence</b></p> <ul style="list-style-type: none"> <li>• Continue to support the implementation of the 2017 Inverleigh Flood Study, including an update to the planning scheme and MFEP once new flood data is available.</li> <li>• Review the damages to council infrastructure as a result of the 2010-2011 floods, to inform potential management actions, i.e. map out the location of council claims from the floods on a GIS system. Completion of this action is likely to be data and personnel dependent.</li> <li>• Undertake a desktop review of the Regional Floodplain Mapping Project in comparison with current planning overlays (FO and LSIO) to determine if an upgrade to the Planning scheme is required, particularly for areas where there is development pressure.</li> </ul>
	<p><b>Land Use Planning</b></p> <ul style="list-style-type: none"> <li>• Develop a brochure to ensure potential purchasers and the public inform themselves (undertake due diligence) when considering potentially flood-prone land.</li> <li>• Develop a guidance note on appropriate recreational infrastructure in flood prone land.</li> </ul>